

ABSTRACT

An optical receiver is disclosed comprising an erbium-doped fiber amplifier (EDFA) that is coupled to a photodiode and transimpedance amplifier without filtering output light signal in the EDFA. Optionally, a clock/data regenerator can be coupled to the electrical output of the transimpedance amplifier for compensating for noise distortion and timing jitter for affecting the control loop feeding back for adjusting the electrical current into a pump laser of an optical pre-amplifier. Furthermore, the optical receiver of the present invention can also be implemented in a transponder.